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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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- of inventorship (Rule 4.17(iv)) for US only

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- without international search report and to be republished upon receipt of that report

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(54) Title: PRE-POLYMERIZED CATALYST COMPONENTS FOR THE POLYMERIZATION OF OLEFINS

(57) Abstract: Catalyst components for the preparation of ethylene (co)polymers capable to produce polymers with high bulk density, to avoid the problems of formation of fines and that have a high activity are provided. Said catalyst components are characterized by comprising a non-stereospecific solid catalyst component, comprising a titanium compound and a magnesium dihalide, which is pre-polymerized with an alpha olefin  $\text{CH}_2=\text{CHR}^1$  wherein R is a C1-C8 alkyl group, to such an extent that the amount of the  $\alpha$ -olefin pre-polymer is up to 100 g per g of said solid catalyst component.

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# INTERNATIONAL SEARCH REPORT

International Application No.

EP 01/05254

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C08F110/02 C08F4/649

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 641 807 A (MITSUI PETROCHEMICAL IND) 8 March 1995 (1995-03-08) examples 1,25	1-6,9, 10,13-18
Y	examples 1,25	1,8,11, 12
Y	EP 0 395 083 A (HIMONT INC) 31 October 1990 (1990-10-31) cited in the application examples 1-5	1,8,11, 12
X	US 5 556 820 A (TSURUOKA MASAYUKI ET AL) 17 September 1996 (1996-09-17) examples 35,44,46,47,54 tables 9,10 column 10, line 31 - line 38	1-7,9, 10,16-18
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☒ Further documents are listed in the continuation of box C.

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Date of the actual completion of the international search

1 November 2001

Date of mailing of the international search report

08/11/2001

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International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 522 423 A (TOSOH CORP) 13 January 1993 (1993-01-13) examples 1,3,5 ---	1,2,9, 10,13-18
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Information on patent family members

International Application No

EP 01/05254

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## REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

receiving Office use only	
International Application No.	
International Filing Date	
Name of receiving Office and "PCT International Application"	
Applicant's or agent's file reference (if desired) (12 characters maximum)	TC 5431 ASC

<b>Box No. I TITLE OF INVENTION</b>	
PRE-POLYMERIZED CATALYST COMPONENTS FOR THE POLYMERIZATION OF OLEFINS	
<b>Box No. II APPLICANT</b> <input type="checkbox"/> This person is also inventor	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)	
Basell Technology Company B.V. Hoeksteen 66 2132 MS Hoofddorp Netherlands	
Telephone No.	
Facsimile No.	
Teleprinter No.	
Applicant's registration No. with the Office	
State (that is, country) of nationality: NL	State (that is, country) of residence: NL
This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input checked="" type="checkbox"/> all designated States except the United States of America <input type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box	
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SACCHETTI, Mario Via Cinzio Belletti 30 44100 Ferrara Italy	
This person is: <input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (If this check-box is marked, do not fill in below.)	
Applicant's registration No. with the Office	
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Continuation of Box III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

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BRITA, Diego  
Via Mulinetto, 63  
44100 Ferrara  
Italy

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

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COLLINA, Gianni  
Via XXI Aprile 1945, 3  
44044 Cassana  
Italy

This person is:

- ☐ applicant only  
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  - (i) *if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;*
  - (ii) *if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;*
  - (iii) *if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;*
  - (iv) *if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;*
  - (v) *if, in Box No. V, the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation-in-part": in such case, write "Continuation of Box No. V" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;*
  - (vi) *if, in Box No. VI, there are more than five earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.*
2. *If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.*

## Continuation of Box N° IV

The persons identified below are hereby/have been appointed to act on behalf of the applicant(s) before the competent International Authorities as AGENT:

ZANOLI, Enrico  
 BASELL POLIOLEFINE ITALIA S.p.A.  
 Intellectual Property  
 P.le G. Donegani, 12  
 44100 FERRARA - ITALY  
 Telephone (39-0532)468122  
 Facsimile (39-0532)467675

GIBERTI, Stefano  
 BASELL POLIOLEFINE ITALIA S.p.A.  
 Intellectual Property  
 P.le G. Donegani, 12  
 44100 FERRARA - ITALY  
 Telephone (39-0532)468135  
 Facsimile (39-0532)467675

REVERZANI, Cristina  
 BASELL POLIOLEFINE ITALIA S.p.A.  
 Intellectual Property  
 P.le G. Donegani, 12  
 44100 FERRARA - ITALY  
 Telephone (39-0532)468377  
 Facsimile (39-0532)467675

GAVERINI, Gaetano  
 BASELL POLIOLEFINE ITALIA S.p.A.  
 Intellectual Property  
 Via Pergolesi, 25  
 20124 MILANO - ITALY  
 Telephone (39-02)67124088  
 Facsimile (39-02)67127373

**Box No. VI PRIORITY CLAIM**

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application:* regional Office	international application: receiving Office
item (1) "12 May 2000 (12/05/00)"	00201702.8		EP	
item (2)				
item (3)				
item (4)				
item (5)				

☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

☐ all items    ☒ item (1)    ☐ item (2)    ☐ item (3)    ☐ item (4)    ☐ item (5)    ☐ other, see Supplemental Box

\* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(h)(ii)): ....

**Box No. VII INTERNATIONAL SEARCHING AUTHORITY**

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / . EPO

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

**Box No. VIII DECLARATIONS**

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of  
declarations

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> Box No. VIII (i)              | Declaration as to the identity of the inventor   | : |   |
| <input type="checkbox"/> Box No. VIII (ii)             | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent             | : |   |
| <input checked="" type="checkbox"/> Box No. VIII (iii) | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | : | 1 |
| <input checked="" type="checkbox"/> Box No. VIII (iv)  | Declaration of inventorship (only for the purposes of the designation of the United States of America)                               | : | 1 |
| <input type="checkbox"/> Box No. VIII (v)              | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty   | : |   |

## Box No. VIII (iii) DECLARATION: ENTITLEMENT TO CLAIM PRIORITY

*The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

in relation to this International application BASELL TECHNOLOGY COMPANY B.V. is entitled to claim priority from earlier application No. 00201702.8 filed 12/05/2000 by virtue of the following:

the applicant's name changed from MONTELL TECHNOLOGY COMPANY B.V. to BASELL TECHNOLOGY COMPANY B.V. on 22 September 2000.

This declaration is made for the purposes of all designations

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".

**Box No. VIII (iv) DECLARATION: INVENTORSHIP** (only for the purposes of the designation of the United States of America)  
*The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.*

**Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv))  
for the purposes of the designation of the United States of America:**

I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

This declaration is directed to international application No. PCT/..... (if furnishing declaration pursuant to Rule 26ter).

I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.

I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.

Prior Applications: 00201702.8, EPO, 12 May 2000

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: SACCHETTI, Mario

Residence: Ferrara, Italy

(city and either US state, if applicable, or country)

Mailing Address: Via Cinzio Belletti, 30, 44100 Ferrara, Italy

Citizenship: Italian

Inventor's Signature: .....  
(if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: .....  
(of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name: BRITA, Diego

Residence: Ferrara, Italy

(city and either US state, if applicable, or country)

Mailing Address: Via Mulinetto, 63, 44100 Ferrara, Italy

Citizenship: Italian

Inventor's Signature: .....  
(if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: .....  
(of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

☒ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

## Continuation of Box No. VIII (i) to (v) DECLARATION

If the space is insufficient in any of Boxes Nos. VIII (i) to (v) to furnish all the information, including in the case where more than two inventors are to be named in Box No. VIII (iv), in such case, write "Continuation of Box No. VIII ..." (indicate the item number of the Box) and furnish the information in the same manner as required for the purposes of the Box in which the space was insufficient. If additional space is needed in respect of two or more declarations, a separate continuation box must be used for each such declaration. If this Box is not used, this sheet should not be included in the request.

Continuation of Box No. VIII (IV)

Name: COLLINA Gianni

Residence: Cassana, Italy

(city and either US state, if applicable, or country)

Mailing Address: Via XXI Aprile 1945, 3, 44044 Cassana, Italy.

Citizenship: Italian.

Inventor's Signature:

Date:

(if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application The signature must be that of the inventor, not that of the agent) (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name:

Residence:

(city and either US state, if applicable, or country)

Mailing Address:

Citizenship:

Inventor's Signature:

Date:

(if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application The signature must be that of the inventor, not that of the agent) (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name:

Residence:

(city and either US state, if applicable, or country)

Mailing Address:

Citizenship:

Inventor's Signature:

Date:

(if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application The signature must be that of the inventor, not that of the agent) (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

## Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:

(a) the following number of sheets in paper form:

request (including declaration sheets) : 9  
 description (excluding sequence listing part) : 15  
 claims : 3  
 abstract : 1  
 drawings : \_\_\_\_\_

Sub-total number of sheets : 28

sequence listing part of description (actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (b) below) : \_\_\_\_\_

Total number of sheets : 28

(b) sequence listing part of description filed in computer readable form

(i) ☐ only (under Section 801(a)(i))(ii) ☐ in addition to being filed in paper form (under Section 801(a)(ii))

Type and number of carriers (diskette, CD-ROM, CD-R or other) on which the sequence listing part is contained (additional copies to be indicated under item 9(ii), in right column): \_\_\_\_\_

This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):

- |   |                     |
|---|---------------------|
| 1. <input checked="" type="checkbox"/> fee calculation sheet  | Number of items : 1 |
| 2. <input type="checkbox"/> original separate power of attorney   | :                   |
| 3. <input type="checkbox"/> original general power of attorney  | :                   |
| 4. <input checked="" type="checkbox"/> copy of general power of attorney; reference number, if any: Gen Subauth. under GA 35358   | : 1                 |
| 5. <input type="checkbox"/> statement explaining lack of signature  | :                   |
| 6. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s):   | :                   |
| 7. <input type="checkbox"/> translation of international application into (language):   | :                   |
| 8. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material  | :                   |
| 9. <input type="checkbox"/> sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other))  | :                   |
| (i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application)   | :                   |
| (ii) <input type="checkbox"/> (only where check-box (b)(i) or (b)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter | :                   |
| (iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column  | :                   |
| 10. <input type="checkbox"/> other (specify):   | :                   |


Figure of the drawings which should accompany the abstract:

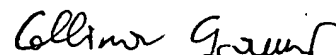
Language of filing of the international application: English

## Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

  
 SACCHETTI, Mario

  
 BRITA, Diego

  
 COLLINA, Gianni

  
 COLUCCI, Giuseppe

For receiving Office use only

1. Date of actual receipt of the purported international application:

3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:

4. Date of timely receipt of the required corrections under PCT Article 11(2):

5. International Searching Authority (if two or more are competent): ISA /

6. ☐ Transmittal of search copy delayed until search fee is paid

2. Drawings:

☐ received:☐ not received:

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

## PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING  
DOCUMENT TRANSMITTED

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE

in its capacity as designated Office

Date of mailing (day/month/year)

15 November 2001 (15.11.01)

International application No.

PCT/EP01/05254

International filing date (day/month/year)

07 May 2001 (07.05.01)

Applicant

BASELL TECHNOLOGY COMPANY B.V. et al

The International Bureau transmits herewith the following documents and number thereof:

\_\_\_\_\_ copy(ies) of declaration(s) (Rule 47.1(a-ter))

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

A.ZOLTANSKI

Telephone No.: (41-22) 338.83.38

**Box No. VIII (iii) DECLARATION: ENTITLEMENT TO CLAIM PRIORITY**

*The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

in relation to this International application BASELL TECHNOLOGY COMPANY B.V. is entitled to claim priority from earlier application No. 00201702.8 filed 12/05/2000 by virtue of the following:

the applicant's name changed from MÖNTELL TECHNOLOGY COMPANY B.V. to BASELL TECHNOLOGY COMPANY B.V. on 22 September 2000.

This declaration is made for the purposes of all designations

☐ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".



**Box No. VIII (iv) DECLARATION: INVENTORSHIP (only for the purposes of the designation of the United States of America)**  
*The declaration must conform to the following standardized wording provided for in Section 214; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iv). If this Box is not used, this sheet should not be included in the request.*

**Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv))  
 for the purposes of the designation of the United States of America:**

I hereby declare that I believe I am the original, first and sole (if only one inventor is listed below) or joint (if more than one inventor is listed below) inventor of the subject matter which is claimed and for which a patent is sought.

This declaration is directed to the international application of which it forms a part (if filing declaration with application).

This declaration is directed to international application No. PCT/..... (if furnishing declaration pursuant to Rule 26ter).

I hereby declare that my residence, mailing address, and citizenship are as stated next to my name.

I hereby state that I have reviewed and understand the contents of the above-identified international application, including the claims of said application. I have identified in the request of said application, in compliance with PCT Rule 4.10, any claim to foreign priority, and I have identified below, under the heading "Prior Applications," by application number, country or Member of the World Trade Organization, day, month and year of filing, any application for a patent or inventor's certificate filed in a country other than the United States of America, including any PCT international application designating at least one country other than the United States of America, having a filing date before that of the application on which foreign priority is claimed.

Prior Applications: 00201702.8, EPO, 12 May 2000

I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: SACCHETTI, Mario

Residence: Ferrara, Italy

(city and either US state, if applicable, or country)

Mailing Address: Via Cinzio Belletti, 30, 44100 Ferrara, Italy

Citizenship: Italian

Inventor's Signature: .....  
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: .....  
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

Name: BRITA, Diego

Residence: Ferrara, Italy

(city and either US state, if applicable, or country)

Mailing Address: Via Mulinetto, 63, 44100 Ferrara, Italy

Citizenship: Italian

Inventor's Signature: .....  
 (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)

Date: .....  
 (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)

☒ This declaration is continued on the following sheet, "Continuation of Box No. VIII (iv)".

**Continuation of Box No. VIII (i) to (v) DECLARATION**

*If the space is insufficient in any of Boxes Nos. VIII (i) to (v) to furnish all the information, including in the case where more than two inventors are to be named in Box No. VIII (iv), in such case, write "Continuation of Box No. VIII ..." (indicate the item number of the Box) and furnish the information in the same manner as required for the purposes of the Box in which the space was insufficient. If additional space is needed in respect of two or more declarations, a separate continuation box must be used for each such declaration. If this Box is not used, this sheet should not be included in the request.*

**Continuation of Box No. VIII (IV)**

Name: ..... COLLINA, Gianni .....  
 Residence: ..... Cassana, Italy .....  
 (city and either US state, if applicable, or country)  
 Mailing Address: ..... Via XXI Aprile 1945, 3, 44044 Cassana, Italy .....  
 Citizenship: ..... Italian .....  
 Inventor's Signature: ..... Date: .....  
 (if not contained in the request, or if declaration is corrected or (of signature which is not contained in the request, or of the  
 added under Rule 26ter after the filing of the international declaration that is corrected or added under Rule 26ter after  
 application The signature must be that of the inventor, not that of the filing of the international application)  
 the agent)

Name: .....  
 Residence: .....  
 (city and either US state, if applicable, or country)  
 Mailing Address: .....  
 Citizenship: .....  
 Inventor's Signature: ..... Date: .....  
 (if not contained in the request, or if declaration is corrected or (of signature which is not contained in the request, or of the  
 added under Rule 26ter after the filing of the international declaration that is corrected or added under Rule 26ter after  
 application The signature must be that of the inventor, not that of the filing of the international application)  
 the agent)

Name: .....  
 Residence: .....  
 (city and either US state, if applicable, or country)  
 Mailing Address: .....  
 Citizenship: .....  
 Inventor's Signature: ..... Date: .....  
 (if not contained in the request, or if declaration is corrected or (of signature which is not contained in the request, or of the  
 added under Rule 26ter after the filing of the international declaration that is corrected or added under Rule 26ter after  
 application The signature must be that of the inventor, not that of the filing of the international application)  
 the agent)

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>TC 5431 ASC</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/EP 01/ 05254</b>	International filing date (day/month/year) <b>07/05/2001</b>	(Earliest) Priority Date (day/month/year) <b>12/05/2000</b>
Applicant  <b>BASELL TECHNOLOGY COMPANY B.V.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. ---

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No.

EP 01/05254

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08F110/02 C08F4/649

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 641 807 A (MITSUI PETROCHEMICAL IND) 8 March 1995 (1995-03-08) examples 1,25	1-6,9, 10,13-18
Y	examples 1,25	1,8,11, 12
Y	EP 0 395 083 A (HIMONT INC) 31 October 1990 (1990-10-31) cited in the application examples 1-5	1,8,11, 12
X	US 5 556 820 A (TSURUOKA MASAYUKI ET AL) 17 September 1996 (1996-09-17) examples 35,44,46,47,54 tables 9,10 column 10, line 31 - line 38	1-7,9, 10,16-18
	--- -/-- ---	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search

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